

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (currently amended): An electromagnet core capable of accommodating made of a soft-magnetic material and including a coil, wherein the electromagnet core comprising is formed with

a soft magnetic powder; and

a binder for the soft magnetic powder, and the binder is made of a polyimide resin.

Claim 2 (currently amended): The electromagnet core according to claim 1, wherein a volume ratio of the polyimide resin to the soft magnetic powder is in a range of from 0.05 wt% to 1.0 wt%.

Claim 3 (currently amended): ~~The electromagnet core according to Claim 1 or 2, wherein the electromagnet core is used for a~~ A measuring valve control electromagnet used for a liquid fuel injector, wherein the measuring valve control electromagnet comprises the electromagnet core according to claim 1.

Claim 4 (currently amended): A method of manufacturing an electromagnet core comprising the steps of accommodating ~~made of a soft magnetic material and including~~ a coil, the method comprising steps of:

forming a lubricant layer on a receiving portion of a surface of a frame of a molding die;

placing inserting a mixture of soft magnetic powder and a binder made of a polyimide resin into the a- molding die frame; and  
molding the mixture by using a pressing process, ~~wherein a lubricant layer is formed on a surface of a receiving portion of the molding frame for receiving the mixture.~~

Claim 5 (currently amended): The method according to claim 4, wherein the step of forming a lubricant layer on a receiving portion comprises the steps of:

heating ~~wherein the receiving portion is heated~~ from a room temperature to a high temperature; ~~and~~  
coating the surface of the receiving portion with a solution containing a lubricant; and  
vaporizing the solvent of the lubricant solution by ~~wherein, before the mixture is inserted,~~  
~~the surface of the receiving portion is coated with a lubricant solution, and a moisture in the coated lubricant solution is vaporized by using a~~ the heat of the receiving portion, ~~thereby forming the lubricant layer.~~

Claim 6 (currently amended): The method according to claim 5, the method further comprising the step of adding ~~wherein a flow initiating material is added to the mixture.~~

Claim 7 (new): A measuring valve control electromagnet used for a liquid fuel injector, the measuring valve control electromagnet comprising the electromagnet core according to claim 2.

Claim 8 (new): The method according to claim 5, wherein the solution containing the lubricant is an aqueous solution.

Claim 9 (new): The method according to claim 8, the method further comprising the step of adding a flow initiating material to the mixture.

Claim 10 (new): The electromagnet core according to claim 1, wherein grains of the soft magnetic powder are coated with an insulating film.

Claim 11 (new): The electromagnet core according to claim 1, wherein the soft magnetic powder is made of electromagnetic soft iron or silicon steel.

Claim 12 (new): The electromagnet core according to claim 1, wherein grain size of the soft magnetic powder is in a range of from 10  $\mu\text{m}$  to 200  $\mu\text{m}$ .

Claim 13 (new): The electromagnet core according to claim 1, wherein grain size of the soft magnetic powder is in a range of from 10  $\mu\text{m}$  to 100  $\mu\text{m}$ .

Claim 14 (new): The electromagnet core according to claim 1, wherein the polyimide resin is made of wholly aromatic polyimide, bismaleide polyimide, or additive-type polyimide.

Claim 15 (new): The electromagnet core according to claim 1, wherein a ratio of the polyimide resin to the soft magnetic powder is in a range of from 0.1 wt% to 0.5 wt%.

Claim 16 (new): The method according to claim 8, wherein the aqueous solution containing the lubricant is an aqueous solution of sodium benzoate or an aqueous solution of potassium dihydrogen phosphate.

Claim 17 (new): The method according to claim 9, wherein the flow initiating material is ethylene bis-stearamide, ethylene bis-laurylamide, or methylene bis-stearamide, or a mixture thereof.

Claim 18 (new): The method according to claim 9, wherein the flow initiating material is a material formed by adding:

30% or less lithium stearate or 12-hydroxy lithium stearate; to

ethylene bis-stearamide, ethylene bis-laurylamide, or methylene bis-stearamide, or a mixture thereof.

Claim 19 (new): The method according to claim 9, wherein the amount of the flow initiating material added to the mixture is in a range of from 0.002 wt% to 0.1 wt%.

Claim 20 (new): The method according to claim 9, wherein grain size of the flow initiating material is in a range of from 1  $\mu\text{m}$  to 20  $\mu\text{m}$ .